## PATENT ABSTRACTS OF JAPAN

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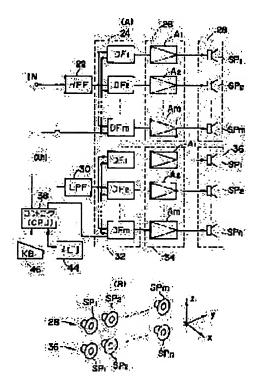
(72)Inventor: CHIYOU SHISEI

## (54) SPEAKER EQUIPMENT

## (57)Abstract:

PURPOSE: To easily control the directivity over a wide frequency band by driving a group of digital filters, to which a common input signal is supplied corresponding to individual speakers of a speaker group with characteristics changed for the purpose of controlling the directivity, by a required sampling frequency.

CONSTITUTION: A high frequency band audio signal passing an HPF 22 is supplied to digital filters DF1 to DFm of a filter unit 24 of the filter group. Filter characteristics of these filters DF1 to DFm are controlled to control the directivity of high frequency band sounds outputted from a high frequency band speaker unit 28 having corresponding plane arrangement type speakers SP1 to SPm. The control on the low frequency band side



is performed in the same manner. The filter unit 24 and a low-pass filter unit 32 are controlled through a controller (CPU) 38 and are driven by the sampling frequency corresponding to the reproducing frequency band of the corresponding speaker group, and the directivity is easily controlled over a wide frequency band by divisional control corresponding to the reproducing frequency band.